



# ***Earned Value Management***

## **Future Directions in DoD**

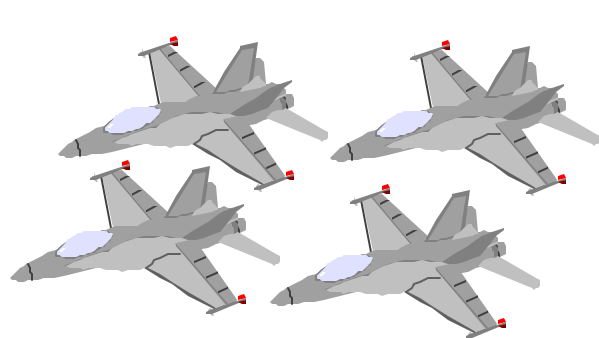
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Office of the Under Secretary of Defense  
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# Earned Value Management

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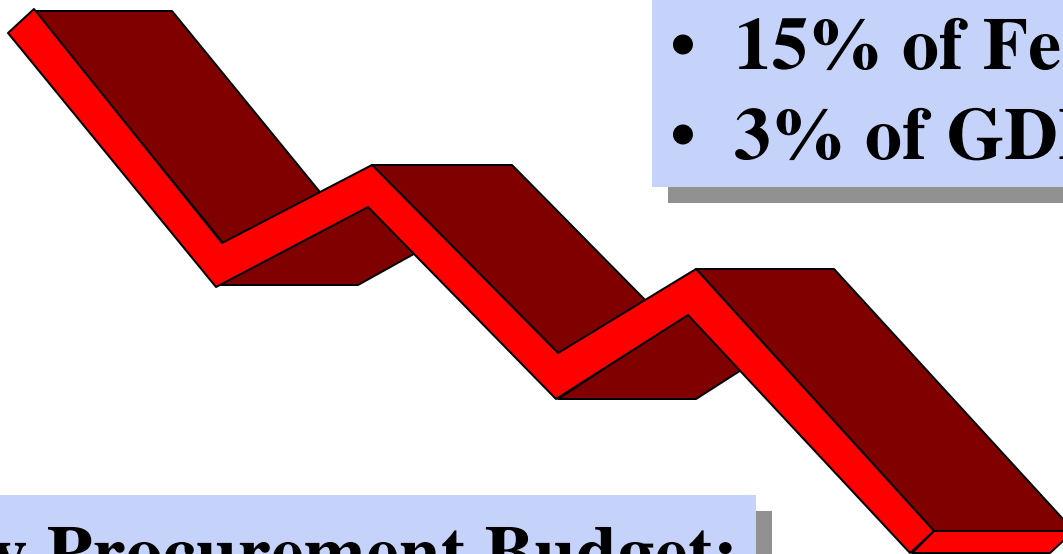
- ◆ **The facts of (DoD procurement) life**
- ◆ **EVM beginnings**
  - **DoD contracting requirement**
- ◆ **EVM status**
  - **Government/Industry best practice**
- ◆ **EVM future**
  - **DoD's role**



## 1961 Pentagon Spending:

- 40% of Federal Budget
- 8% of GDP

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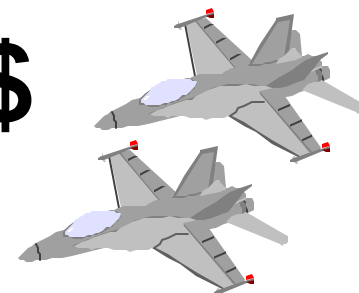
## 1997 Pentagon Spending:

- 15% of Federal Budget
- 3% of GDP

## Military Procurement Budget:

- Down 67% since 1985 peak

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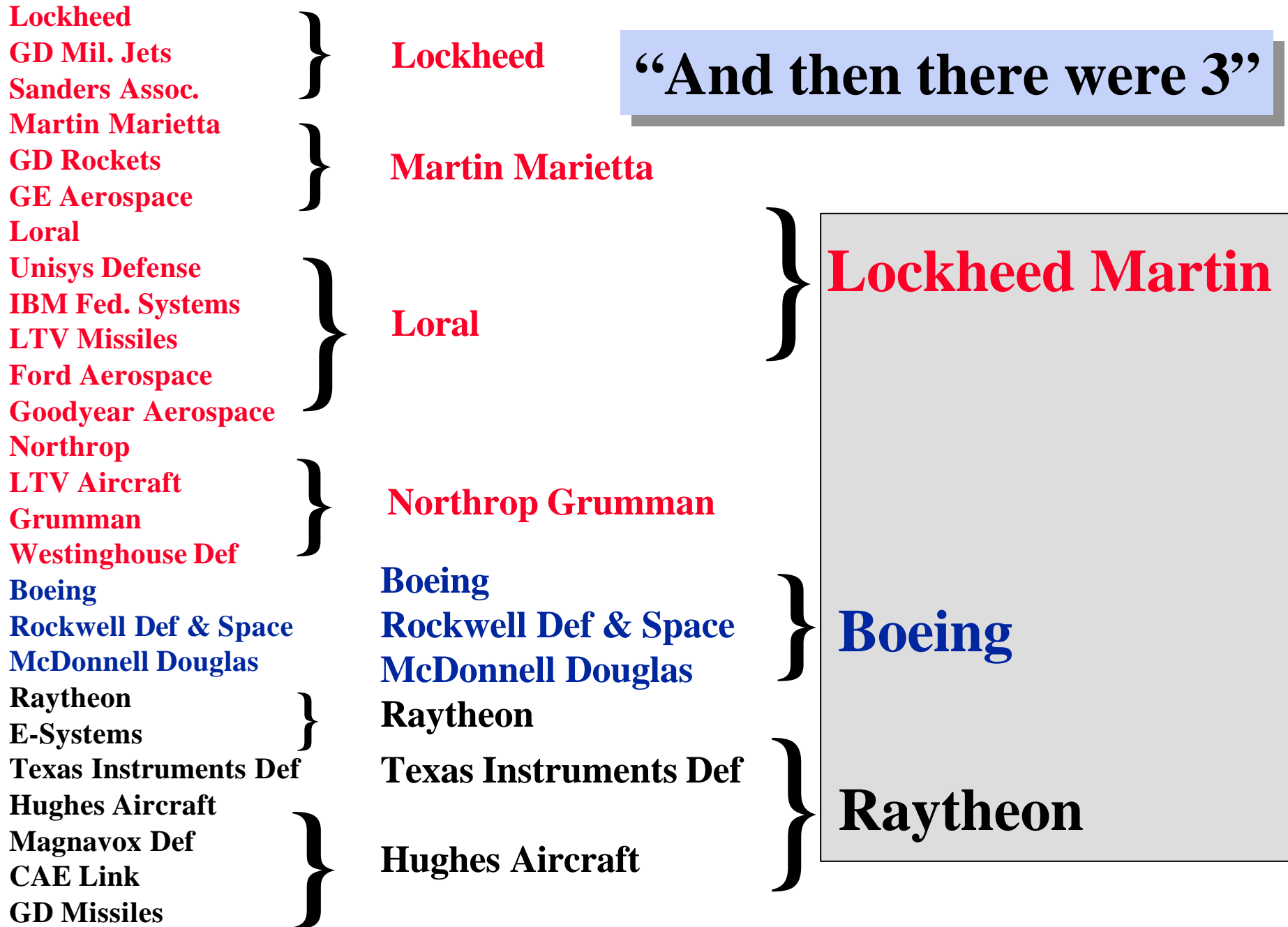


# DoD Responses

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- ◆ Acquisition Reform
- ◆ “The Last Supper”
  - 1993 SecDef dinner
  - Fewer, larger companies
- ◆ Improved Defense Project Management
  - Better integrate cost, schedule, technical perf.
  - Earned Value Management





# Industrial Base Concerns

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- ◆ **Market forces**
  - Monopsony
  - Monopoly
  - Price gouging
- ◆ **Vertical integration**
- ◆ **Innovation**
- ◆ **Quality**

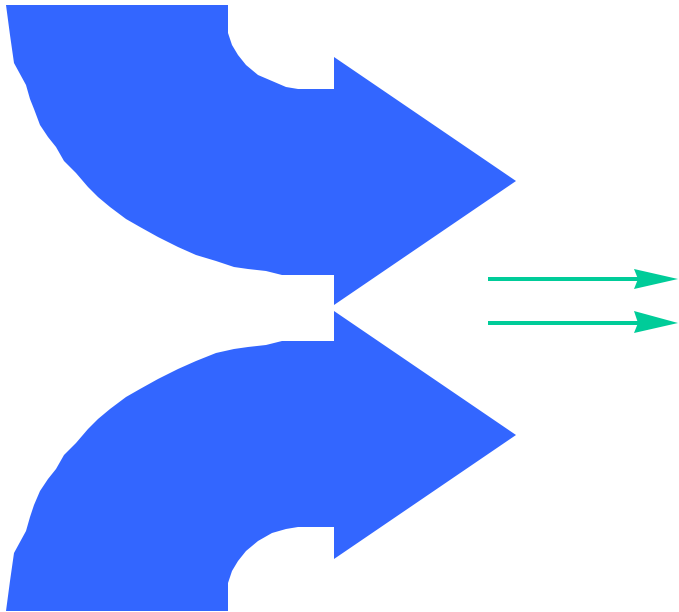


“The late 1990s and the early 21st Century will mark a difficult and expensive procurement era.”

# Earned Value Management: Origins

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Industry Best  
Practices



Government  
Requirements

**1967: DoD Instruction 7000.2**  
**35 Cost/Schedule Control  
Systems Criteria (C/SCSC)**

## ***Criterion-based Management***

- Brief statements of attributes
- Not “how-to manage”
- Not a system
- Minimum acceptable standard

**1997: DoD Regulation 5000.2-R**  
**32 Earned Value Management  
Systems (EVMS) Criteria**



# Earned Value Management: Implementation Problems

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- ◆ “Financial Management”
- ◆ Audit-like reviews
- ◆ Government-required reporting
- ◆ Too many “surprises”
  - A-12 (Navy)
  - AAWS-M (Army)
  - C-17 (Air Force)
- ◆ Challenge: keep good principles, stop bad practices



# Earned Value Management: DoD Improvements

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- ◆ **Redefined Earned Value Ownership**

- From finance to project management
- From reporting to management
- From government to industry

- ◆ **Better management tools**

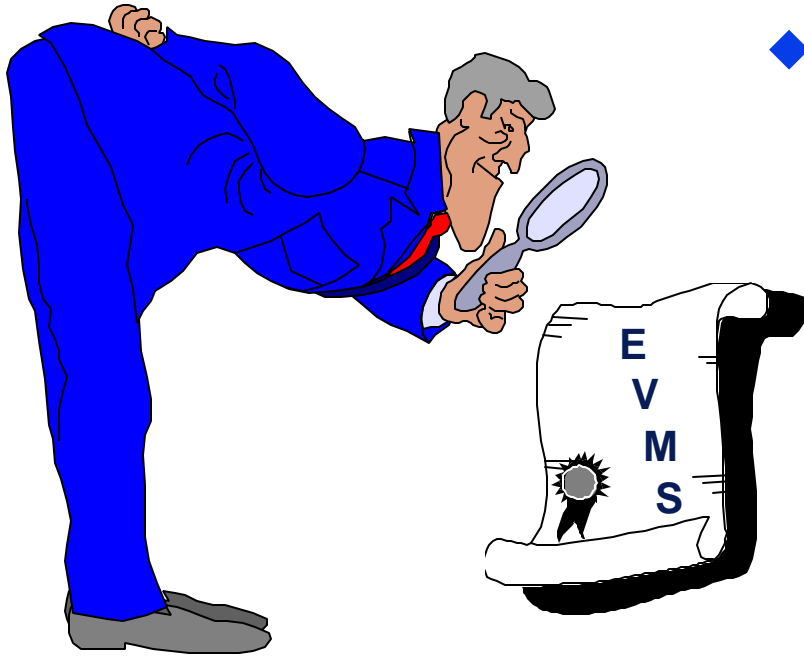
- ◆ **Integrated Baseline Reviews**

- Planning process
- Better technical/risk management



# DoD Earned Value Policy

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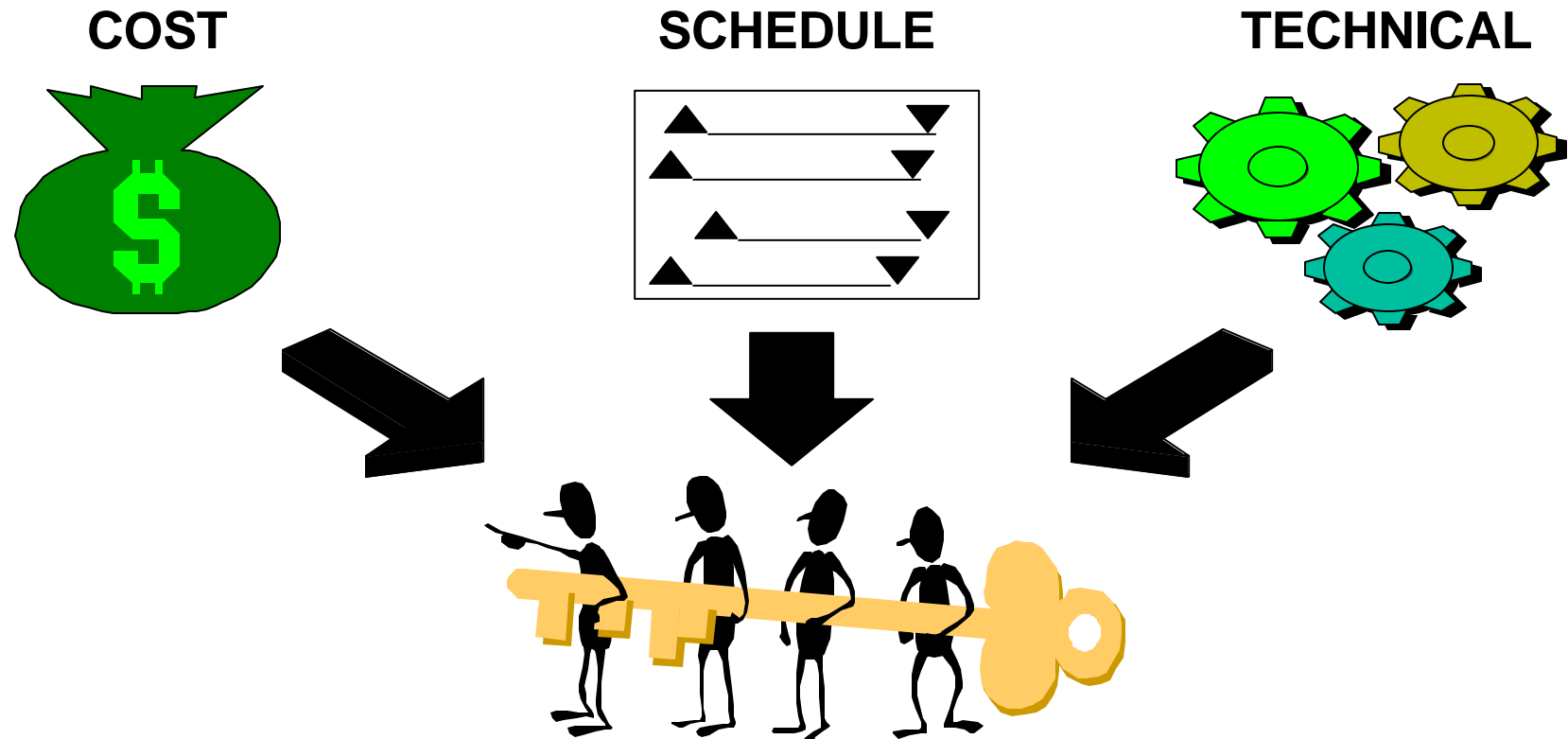


- ◆ **Examined & Reaffirmed**
  - 1984 - Arthur D. Little Study**
  - 1991 - DoD Instruction 5000.2**
  - 1993 - Inspector General Report**
  - 1994 - Coopers & Lybrand Study**
  - 1996 - DoD Regulation 5000.2-R**
  - 1996 - Office of Management & Budget Circular A-11 Part 3**
  - 1997 - General Accounting Office Report**

**Australia, Canada, New Zealand, Sweden, United Kingdom**

# Integrated Product Teams: The Key to Success

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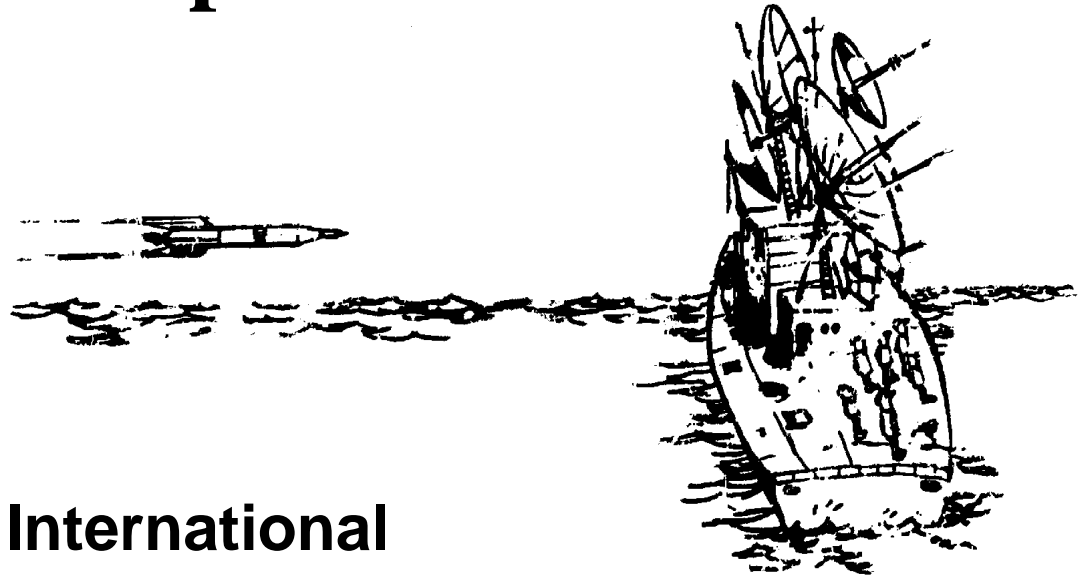


**Management systems don't manage - people do!**  
**EVM is used to identify, communicate and MANAGE**  
**the resource effect of technical and schedule problems**

# The Really Nice Thing About Not Planning

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**Failure comes as a complete surprise and is not preceded by long periods of worry and depression!\***



**\*Micro Planning International**

# Integrated Baseline Reviews

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- ◆ **Mutual understanding of plan for**
  - Scope
  - Schedule
  - Resources
- ◆ **Emphasis on risk**
- ◆ **Planning process vs. review**
- ◆ **PM leads; EVM staff supports**
  - Management system reviews effectively eliminated



# Putting it all together:

$$\text{IPT} + \text{IBR} + \text{EVM} = \text{IPM}$$

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- ◆ **Involve earned value specialists and cost estimators on program IPTs**
- ◆ **Tailor reports - limit levels and analysis**
- ◆ **Do Integrated Baseline Reviews**
- ◆ **Encourage active, forward-looking management**

**“IPTs must control all the project, technical and functional elements needed for the product or process.”**

# **Earned Value Management: Gov't/Industry Best Practice**

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- ◆ **Dec. 1996 USD(A&T) accepted 32 EVMS guidelines as replacement for C/SCSC**
- ◆ **Reserved right for government reviews**
  - **As determined by project manager**
  - **“Self-certification” not in public interest**
- ◆ **Encourages evolution to “true” standard**
  - **Industry/International (ISO)**
  - **For now, DoD and industry EVMS are equal**



# **Earned Value Management: The Future**

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- ◆ **Office of Management & Budget Guidance**
  - 1996 - Circular A-11 Part 3
  - 1997 - Principles of Budgeting for Capital Asset Acquisitions (FY98 Budget)
  - 1997 - Capital Programming Guide (Supplement to A-11 Part 3)
- ◆ **Government-wide management principles**

***American Project Management Forum***

# Earned Value Management: The Future

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- ◆ A-11 Part 3 extends DoD-pioneered performance measurement to all agencies
- ◆ It effectively requires Earned Value Management for all contractor performance-based management systems
- ◆ Agency budget approvals will depend on *performance* measured by EVM



***EVM: A 30-year old idea is today's best practice!***

# **Earned Value Management: The DoD's Role**

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- ◆ **Integrated Program Management Initiative**
- ◆ **Monitor industry standards**
- ◆ **Participate in standards-setting bodies**
- ◆ **Continue inter-agency cooperation**
- ◆ **Improve project management education**
  - **Within government**
  - **Cooperate with academia and professions**
- ◆ **Improve in-house management**